Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (previously presented)A magnetically driven pump, comprising:
a casing;

a containment shell fixed to the casing;

a shaft fixed to the containment shell;

an impeller rotatable about the shaft within the casing;

a magnetic coupling releasably coupled to the impeller and rotatable about the shaft;

a rear bearing positioned between the impeller and the shaft; and

a thrust control valve including a rear thrust ring positioned between the containment shell and the rear bearing, an opening of the thrust control valve being defined by a variable spacing between the thrust ring and the rear bearing.

2. (original) The pump of claim 1, wherein the rear bearing is movable axially in direction along an axis of the shaft thereby changing a size of the thrust control valve opening.

3. (original) The pump of claim 1, further comprising opposing inner and outer front wear rings positioned at a front portion of the impeller, and opposing inner and outer rear wear rings positioned at a rearward portion of the impeller.

4. (original) The pump of claim 1, wherein the containment shell includes an open front end and a closed rear end, and the pump further comprises a stator that includes at least one radially extending vane and is positioned at the rear end of the containment shell to stabilize

rotational flow created by rotation of the impeller and magnetic coupling relative to the containment shell.

5. (original) The pump of claim 4, wherein the rear thrust ring is embedded in the stator.

6. (original) The pump of claim 4, wherein the stator is removable from the containment shell.

7. (original) The pump of claim 1, wherein the shaft includes an internal channel extending between and in fluid communication with the thrust control valve and the primary fluid flow in the impeller.

8. (original) The pump of claim 3, wherein the inner front wear ring includes at least one locking tab and the impeller includes an inner front wear ring seat having at least one locking recess configured to engage the locking tab to releasably retain the inner front wear ring.

9. (currently amended) A magnetically driven pump, comprising:

a containment shell having a closed end, an open end, and defining an interior volume;

a shaft secured to the closed end of the containment shell within the interior volume; and

an impeller positioned at least partially within the containment shell;

a first magnet coupled to the impeller and a second magnet positioned outside of the containment shell, wherein rotation of the second magnet causes rotation of the impeller about the shaft; and

a stator secured at the closed end of the containment shell and including at least one vane extending into the interior volume in a generally radial direction from an axis of the shaft.

10. (original) The pump of claim 9, wherein the stator is configured to be releasably secured to the containment shell.

11. (original) The pump of claim 9, wherein the pump further includes a rear thrust ring secured to the stator.

12. (original) The pump of claim 9, wherein the stator includes a plurality of radially extending vanes and an outer ring interconnecting the vanes.

13. (currently amended) The pump of claim [[7]] 9, ~~further comprising an~~ wherein the impeller ~~having~~ includes a fluid channel defining a direction of primary flow through the pump and a shaft bore, the shaft bore being sized to receive ~~the~~ rear bearings that facilitate rotation of the impeller ~~on~~ about the shaft, the fluid channel being in fluid communication with ~~the~~ an internal channel of the shaft.

14. (original) The pump of claim 13, further comprising a fluid return configured for mounting to an end of the shaft and configured to direct fluid flow from the internal channel into the primary fluid flow and provide a venturi effect.

15. (previously presented)The pump of claim 1, wherein the containment shell includes an open end, a closed end, and an attachment flange extending radially from the open end of the containment shell, the attachment flange configured to be secured to the casing and including an outer rear wear ring retainer, and the pump further includes an outer rear wear ring releasably secured to the outer rear wear ring retainer without an intervening member and an inner rear wear ring releasably secured to the rear end of the impeller without an intervening member and in alignment with the outer rear wear ring.

16. (original) The pump of claim 15, wherein the casing includes an outer front wear ring retainer, and the pump further comprises outer and inner front wear rings, the outer front wear ring being releasably secured to the outer front wear ring retainer without an intervening member, and the inner front wear ring being releasably secured to the front end of impeller without an intervening member and in alignment with the outer front wear ring.

17. (original) The pump of claim 16, wherein the wear rings include locking tabs configured to provide a twist lock mounting to the casing, containment shell or impeller.

18. (original) A method of balancing a magnetically driven pump that includes a containment shell having an open front end and a closed rear end, a shaft having an internal channel and being fixed to the rear end of the containment shell, a magnetic coupling rotatable about the shaft within the containment shell, a rear bearing positioned between the magnetic coupling and the shaft and movable relative to the shaft, and a thrust control valve including a thrust ring and a valve opening having a size defined by a relative position between the rear bearing and the thrust ring, the method comprising the steps of:

positioning the thrust control valve at the rear end of the containment shell between the containment shell and the rear bearing;

increasing fluid pressure in the containment shell thereby moving the rear bearing axially away from the thrust ring to increase the size of the valve opening;

moving fluid through the valve opening into the internal channel of the shaft thereby decreasing pressure in the containment shell; and

moving the rear bearing axially toward the thrust ring as the pressure in the containment shell decreases.

19. (original) The method of claim 18, wherein the impeller includes a fluid channel for primary fluid flow through the pump, and the method further comprises moving the fluid in the internal channel of the shaft into the primary fluid flow.

20. (original) The method of claim 18, wherein the rear bearing is positioned at the rear end of the containment shell, the method further comprising extending the rear bearing rearward of the magnet assembly whereby the only the rear bearing contacts the thrust ring to define the thrust control valve.

21. (new) A magnetically driven pump, comprising:

a casing;

a containment shell fixed to the casing;

a shaft fixed to the containment shell;

an impeller rotatable about the shaft within the casing;

a magnetic coupling releasably coupled to the impeller and rotatable about the shaft;

a rear bearing positioned between the impeller and the shaft; and

a thrust control valve defined between the containment shell and the rear bearing, an opening of the thrust control valve being defined by a variable spacing between the thrust ring and the rear bearing;

inner and outer rear wear rings positioned between the impeller and the containment shell with the inner rear wear ring mounted to the impeller and the outer rear wear ring mounted to the containment shell, wherein the rear wear rings are arranged radially relative to each other, and the rear wear rings are configured to restrict fluid flow between the wear rings.

22. (new) The pump of claim 21, further comprising inner and outer front wear rings positioned between the impeller and the casing with the inner front wear ring mounted to the impeller and the outer front wear ring mounted to the casing, wherein the front wear rings are arranged radially relative to each other.

23. (new) The pump of claim 1, wherein the shaft includes an internal channel extending coaxially with an axis of the shaft, the internal channel in fluid communication with the thrust control valve and a primary fluid flow in the impeller.